

"DEDICATED TO THE MODELER...DESIGNED WITHOUT COMPROMISE."

ELECTRONIC IGNITION ENGINES



Sure starts with less time and effort!

Most gasoline engines require flip after flip to start. Turning over a Fuji-Imvac engine with EIS usually takes just one. Here's why.

The prop needs to hit a fairly high number of rpm to create the ignition spark needed to start most engines. But with Fuji-Imvac engines, the El unit creates the spark by stepping up the power of a common 4.8V battery to 10,000 volts. Since the spark is already there, the engine can catch it at a much lower proprpm. And the lower the proprpm that's required, the easier it is to start.

Fuji-Imvac Engines: starting with the spark of genius.



Sealed and protected from moisture, vibration and temperature, the solid-state controller box is designed for firewall mounting. Plus, it's already wired and ready for installation, with a spark plug cap and standard 2-pin battery connector attached.

The rpm sensor detects and automatically adjusts engine timing for easier starts and more power at any rpm, and is lighter and more compact than conventional magneto systems.



In addition to faster, easier starts, Fuji-Imvac engines also share all of these standard features:

- CNC-machined parts
- Walbro™ butterfly carburetors with regulating pump
- True chrome-plated cylinder
- Ball bearing-supported crankshaft and camshaft
- Dynamically balanced flywheel, prop hub and crankshaft
- Direct, designed-for-R/C throttle linkage
- Muffler heat transfer shield
- Heat-resistant paint on the cylinder head
- Custom firewall mounting system
- Compact, high-performance scale muffler



Plus: all Fuji-Imvac engines burn an inexpensive 40:1 gas/oil mix that can help them last up to 4 times longer than other engines.



- Delivers impressive power in a compact size perfect for .90-1.20-sized aircraft.
- Features easy, straight-out throttle linkage, and the ability to swing 16" and 18" props easily.

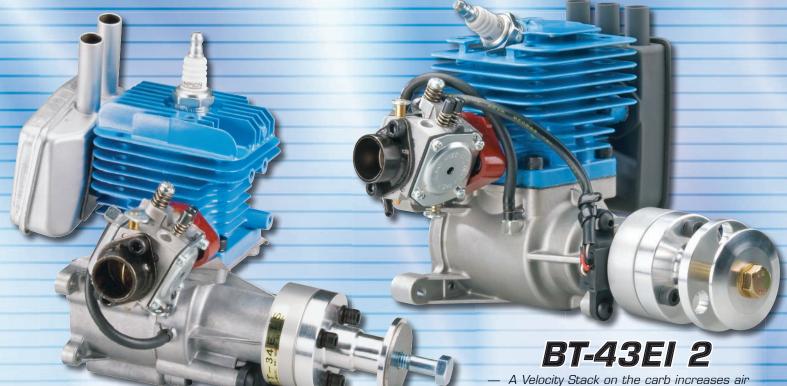
Fuji-Imvac Engines: first to use Fair Weights™

Instead of "engine-only" weights, Fuji-Imvac has provided Fair Weights for all engines* in this catalog. This is the best and most realistic estimate of total "installed" weight available, because the weight of the muffler(s) and all necessary hardware is included along with the engine.

*Weights listed for marine engine is engine weight only.

ELECTRONIC IGNITION ENGINES





BT-34EI

- Boasts a new crankcase design and even easier mounting than before.
- The lightweight muffler is rear-mounted to fit inside more cowls.

- A Velocity Stack on the carb increases air flow to help push fuel into the chamber.
- Three bearings one front, two center help to lessen vibration.
- The Friction Disk Pad is an added safety feature that helps keep the prop from slipping on the prop hub.



The innovative back plate allows modelers to bolt the engine directly to the firewall—no mounting plate required! That makes for easier mounting, as well as lower overall weight and less vibration.

Stock #	Description	Displacement (cu in/cc)	RPM Range	Output (hp @ rpm)	Fair Weight (lb/kg)
FJIG0125	BT-24EI	1.46/24.0	1,200-11,000	2.2 @ 11,000	2.4/1.09
FJIG0134	BT-34EI	1.95/34.0	1,200-10,000	3.2 @ 11,000	3.0/1.5
FJIG0144	BT-43EI-2	2.6/42.5	1,200-11,000	4.2 @ 11,000	3.5/1.6

All include: EIS, Walbro carburetor, Champion RCJ6Y spark plug and wrench, muffler and mounting hardware, prop hub, spinner bolt

All require: regular unleaded gasoline, engine oil, engine kill switch, 4.8V NiCd or NiMH battery pack

ES LARGE-SCALE ELECTRONIC IGNITION ENGINES



- Lightweight, 3.0 cu. in. power plant offers the best power-to-weight ratio of any Fuji-Imvac El engine.
- Ideal for powering the Top Flite® giant-scale P-47D Thunderbolt and P-51D Mustang.



- Big, 3.85 cu. in. displacement makes it Fuji-Imvac's largest single-cylinder engine.
- Top-end power makes it a solid choice for big birds such as the Top Flite® Giant-Scale F4U Corsair!
- Space-saving muffler helps preserve scale lines and looks while minimizing exhaust noise.



BT-86EI Twin

- Offers significantly more power than comparably sized engines at considerably less cost.
- Overflow/relief valve automatically eliminates excessive fuel caused by excess idling.



	Stock #	Description	Displacement (cu in/cc)	RPM Range	Output (hp @ rpm)	Fair Weight (lb/kg)
i	FJIG0087	BT-50EI	2.85/46.5	1,100-9,000	5.2 @ 9,000	3.5/1.6
	FJIG0088	BT-64EI	3.85/63.1	1,100-9,000	5.7 @ 9,000	3.8/1.8
	FJIG0089	BT-86EI Twin	5.2/86.0	1,100-8,500	7.5 @ 8,500	6.6/2.9

Recommended Props: BT-50EI/21x10 carbon @ 7000 rpm, 20x10 wood @ 7000 rpm, 20x10 carbon @ 7400 rpm; BT-64El/22x12 carbon; BT-86El Twin/24x12 carbon @ 6400 rpm, 24x10 carbon @ 7400 rpm

All include: EIS, Walbro carburetor, Champion RCJ6Y spark plug and wrench, muffler and mounting hardware, prop flange, bolt

All require: regular unleaded gasoline, engine oil, engine kill switch, 4.8V NiCd or NiMH battery pack

4-STROKE ELECTRONIC IGNITION ENGINES







Realistic sound with true-scale power.

To make giant-scale models perform just like their full-size counterparts, the perfect power plant is a 4-stroke engine. And the perfect 4-stroke is a Fuji-Imvac engine, with advantages all its own.

First and foremost is incredible fuel economy. A Fuji-Imvac 4-stroke consumes less than half as much fuel as a comparable 2-stroke, which means twice the flight time per fill for less than half the cost. They're also amazingly quiet, which makes them welcome even at the most noise-sensitive fields. Plus, they have the ability to maintain a consistent rpm range at all times and deliver consistently high torque anywhere within it.

Fuji-Imvac 4-stroke engines boast all of these features:

- Incredible fuel economy
- Super-quiet operation
- A consistent rpm range for scale speeds and realistic performance
- High torque for swinging bigger props
- Excellent power-to-weight ratio

No more gas-oil mixing! Parts are lubricated by a constant flow of ultra-low viscosity oil from a pan on the bottom of the engine. A 3.4 oz. (100 cc) bottle of oil is included.



makes these powerhouses

more reliable.

Both the BF-25EI and BF-34EI feature a geardriven camshaft, which



Like all Fuji-Imvac engines, 4-strokes offer the smooth, pinpoint throttle control of a Walbro butterfly carb. Fine-tuning the idle, low- and high-speed screws takes only a slotted screwdriver and a few seconds.



Stock #	Description	Displacement (cu in/cc)	RPM Range	Output (hp @ rpm)	Fair Weight (lb/kg)
FJIG0225	BF-25EI	1.5/24.5	1,400-9,000	1.6 @ 7,500	4.0/1.8
FJIG0234	BF-34EI	2.1/34.0	1,000-7,500	2.0 @ 7,500	4.9/2.0

Recommended Props: BF-25EI/18x8 carbon, 20x6 carbon; BF-34EI/18x8 carbon, 20x6 carbon

Both include: EIS, Walbro carburetor, Champion RCJ6Y spark plug and wrench, muffler and mounting hardware, prop flange, bolt

Both require: regular unleaded gasoline, engine oil, engine kill switch, 4.8V NiCd or NiMH battery pack



AUTOMATIC TIMING MODULE ENGINES

Fuji-Imvac's revolutionary Automatic Timing Module (ATM) solves the dilemma of whether to set your giant-scale gasoline engine's timing low for easy starts or higher for better performance. With its one-piece Capacitive Discharge Ignition

system, the ATM keeps the engine's initial timing low, but automatically adjusts to throttle movements to maintain peak power and performance anywhere in the rpm range.

ATM: a tuning tool for the modeler.



- Comes with reliable, solid-state ATM starting.
- More displacement than a .32, for more power and performance!
- The rear-mounted muffler is lightweight and compact, to preserve scale looks inside cowls.



 The rotor is equipped with superstrong MightyMags™ magnets.

Description Displacement (cu in/cc) **RPM Range** Output (hp @ rpm) Fair Weight (lb/kg) BT-34B 1.95/34.0 1,200-10,000 3.2 @ 11,000 3.7/1.7 FJIG0034 2.85/46.5 5.2 @ 10,000 5.3/2.4 FJIG0047 BT-50SB 1,200-10,000 FJIG0064 3.85/63.1 1.300-9.000 5.7 @ 9.000 5.7/2.56 BT-64A FJIG0086 BT-86 5.25/86.0 1.100-9.000 7.5 @ 9.000 7.2/3.27

All include: ATM, Walbro carburetor, Champion RCJ6Y spark plug and wrench, muffler and mounting hardware, firewall mount, prop flange and bolt

All require: regular unleaded gasoline, engine oil, engine kill switch



Stock #	Description	Displacement (cu in/cc)	RPM Range	Output (hp @ rpm)	Eng. Weight (lb/kg)	
FJIG0128	BT-28 Marine	1.7/28.0	3,000-12,000	3.5 @ 10,000	3.2/1.45	
Includes: V-Start recoil starter, Walbro carburetor, NGK spark plug Requires: regular unleaded gasoline, engine oil, muffler, mounting rails, driveshaft, running hardware						



ENGINE ACCESSORIES

Spring Starters

- The economical alternative to electric starters
- Includes spring, one-way bearing w/aluminum shaft and hardware

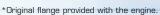
FJIG1032 BT-32A FJIG1050 50-86



Prop Flanges

 Machined from aluminum for lightweight strength and vibration-free rotation

FJIG6722 BT-32A/B 62 mm BT-32A/B 42 mm FJIG6724 BT-24EI 50 mm* FJIG6725 BT-32EI 62.5 mm* FJIG6730 FJIG7679 BT-43EI 32.5 mm* FJIG7686 BT-86/64 50 mm* FJIG7687 BT-86/64 40 mm BT-86/64 60 mm FJIG7688 FJIG7689 BT-86/64 70 mm





FJIG6722

EIS Conversion Kits

- Convert your ATM engine to electronic ignition
- All kits include: El unit, rotor, sensor, prop flange, hardware and instructions
- FJIG1009 also includes 2 leads w/bullet connectors

FJIG1007 BT-50 FJIG1008 BT-64 FJIG1009 BT-86



EIS Digital Tachometer

- Shows the rpm in a twodigit, red LCD display for the BT-50El, BT-64El and BT-86El engines
- Installs inline between the EIS unit and a 4.8V battery
- Easy operation ON/OFF button

FJIP9920



Mufflers & Muffler Sets

- Mufflers include muffler and gaskets (FJIG6040 and FJIG6090) or muffler alone (FJIG6035)
- Sets include steel muffler, pipe, gaskets and hardware



 Smoke Muffler Set includes smoke coil and requires pump and tank

FJIG5821 BT-24A*
FJIG6000 Set BT-32A/B*
FJIG6002 Smoke Set BT-32A/B
FJIG6020 Set BT-43EI*
FJIG6030 BT-50A*

FJIG6035 Black BT-50SB* FJIG6040 BT-64A* FJIG6090 BT-86* FJIG6095 BF-25/34*

*Original muffler included with the engine.

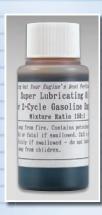
Super Lube 2-Cycle Oil 250 cc

- With a mixing ratio of 150:1, a little goes a long way
- Comes in a 250 cc bottle

Spinner Bolts

FJIG8020 BT-86 FJIG8050 32-43-50





NiMH 4.8V 1400mAh Flat Pack for EIS

- Designed to be used with the Fuji-Imvac Electronic Ignition System (EIS)
- Features highdischarge 2/3A cells, with the same quality as



same quality as found in all Fuji-Imvac engines

FJIP9925

Electric Starter

- Eliminates the need for a field starter system, and offers more realistic ignition through a toggle switch on the radio
- Soft Start relay switch allows the starter to spin up to speed gradually, for more reliability and less wear on the bearing
- Easy to install, and fits the Fuji-Imvac BT-50, BT-64 and BT-86 engines

FJIG9902



Dependable Performance in the Air.

It's a modeler's priority, an engineering goal — and dependability is a "given" with every Fuji-Imvac engine built.

Besides being an enterprising engineer, Fuji-Imvac founder Seiji Tanabe is also an avid giant-scale modeler. He understands a pilot's needs, and selects the best designs, components and manufacturing methods to meet them. That's why Fuji-Imvac engines offer the fit and finish of CNC-machined parts, world-famous Walbro carburetion - and the confidence of a full 3-year warranty on every engine sold.



Dependable Service on Demand.

Hobby Services U.S.A.

For over 20 years Hobby Services has been providing modelers with prompt attention, modern facilities, state-of-the-art equipment and hands-on expertise — and they've been the only authorized North American service center for Fuji-Imvac engines since they were introduced in 2001.

Just like Mr. Tanabe, each Hobby Services technician is an enthusiastic R/Cer as well. They know how important it is to diagnose the problem quickly, repair it accurately and return it promptly. And thanks to the internet, the turnaround can be even shorter. Repair estimates and "engine received" notices can be transmitted by Hobby Services via e-mail or fax and with a service number in hand, a customer can electronically pay for repairs and specify a return shipping method, all by logging onto www.hobbyservices.com.



Skilled technicians, innovative electronic systems and an extensive inventory of genuine Fuji-Imvac parts make it easy to provide accurate repairs in a matter of days.

Hobby Services subscribes to the ideal of "one engine, one technician", an approach that reinforces pride in craftsmanship and customer confidence that the repair was done right. Judging by the positive feedback we've received, it's the right approach for ensuring top results and customer satisfaction.

For service on your Fuji-Imvac engine, send it post paid and insured to:

Hobby Services 3002 N. Apollo Drive, Suite 1 Champaign, Illinois 61822 U.S.A Telephone: (217) 398-0007 Website: www.hobbyservices.com

Request service, track status and pay repair bills online — 24 hours a day — via www.hobbyservices.com!

Fuji-Imvac is not related to the original Fuji Engines sold by Mecoa.

© Copyright 2008 — 3002059 Brochure No. FJIZ2008 Distributed Exclusively Through: GREAT PLANES® MODEL DISTRIBUTORS, P.O. Box 9021, Champaign, IL 61826-9021